

WHITE PAPER

FUJITSU AND CITRIX – PARTNERSHIP IN DESKTOP VIRTUALIZATION

This whitepaper describes the impact of the OEM partnership between Fujitsu and Citrix®. Under the terms of this agreement, Fujitsu integrates Citrix® XenDesktop® into its virtual workplace solutions. Furthermore, Fujitsu adds Citrix® XenServer® to its PRIMERGY x86 server virtualization offerings.



TABLE OF CONTENTS

Relationship ever since the beginning	2
Virtual Desktop Infrastructure	2
Desktop virtualization is more than VDI	2
Fujitsu: Desktop virtualization from the very beginning	3
Citrix is a major desktop virtualization player	3
OEM partnership makes life easier	4
Products included in OEM agreement	4
Integration with PRIMERGY server management	5
Higher support and service capabilities	5
Why Fujitsu is important for Citrix	5
Summary	5
Additional information	5

RELATIONSHIP EVER SINCE THE BEGINNING

The partnership between both the companies, Fujitsu and Citrix is nothing new. Fujitsu went together with Citrix thru all generations of terminal server solutions, such as Winframe, Metaframe, Presentation Server and XenApp, that we also use internally.

We have always been among the top three resellers of Citrix software in Germany. As a global system integrator, our Citrix certified IT consultants in our local competence centers have supported benchmarking, sizing, integration and rollout of Citrix solutions.

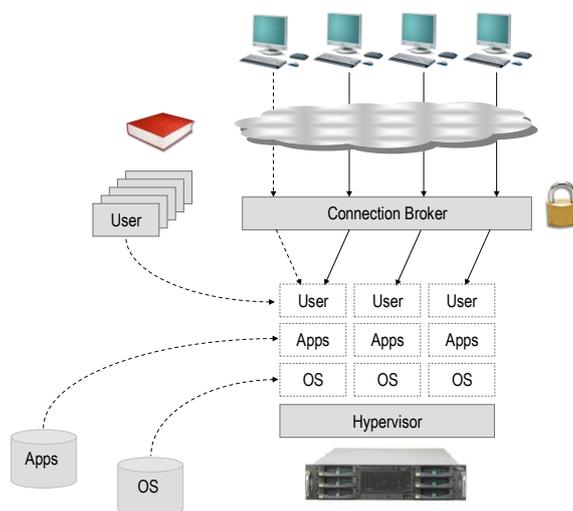
And of course our infrastructure products, such as FUTRO thin clients, PRIMERGY servers and ETERNUS storage systems are Citrix certified, and we have been a Citrix Ready Partner for years. Furthermore Fujitsu is a founding member of the Citrix technology Alliance which was founded in early 2009.

There is a large joint customer base, with individual customers having terminal server farms in place for 10,000s of seats.

VIRTUAL DESKTOP INFRASTRUCTURE

The terminal server concept is a great concept, but it has some limitations, too. Applications need to be multi-user capable, and you don't get the same degree of personalization and isolation people are used to from a traditional PC. Starting in 2006, a new paradigm - called VDI or Virtual Desktop Infrastructure - emerged, which combined the advantages of the traditional PC, the terminal server concept and server virtualization: The benefit for the customer is manifold:

- Better quality of service, resulting in higher end user productivity and business continuity
- Higher flexibility and speed, e.g. with integration activities after mergers and acquisitions
- Reduced risks, in particular related to data loss and data theft
- Compliance demands can be met much better.
- And not to forget: Operational costs can be saved



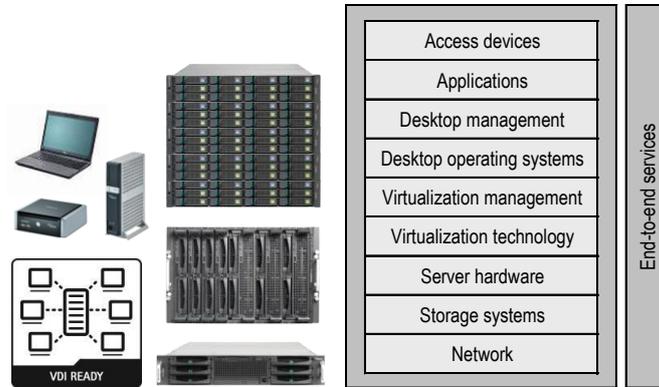
DESKTOP VIRTUALIZATION IS MORE THAN VDI

Virtualization always means breaking the tight coupling between two neighboring layers in the solution stack, which then leads to increased flexibility and efficiency. With VDI which in the simplest example encompasses just a hypervisor, a virtualization management and a connection broker, you separate the desktop operating system from the hardware underneath. You can increase flexibility and efficiency even more, if you separate the applications from the desktop operating system or the user profile from the desktop image. This brings technologies such as application virtualization and user profile virtualization into the game. Printing to any local printer requires the separation of the printer hardware from the desktop image, and therefore a printer virtualization solution. So, desktop virtualization is absolutely more than just VDI.

Moreover, to optimize desktop virtualization solutions, methods for storage reduction (e.g. OS streaming, volume cloning, data de-duplication and thin provisioning) need to be taken into consideration, just as network accelerators and components for multi-media and graphics support

FUJITSU: DESKTOP VIRTUALIZATION FROM THE VERY BEGINNING

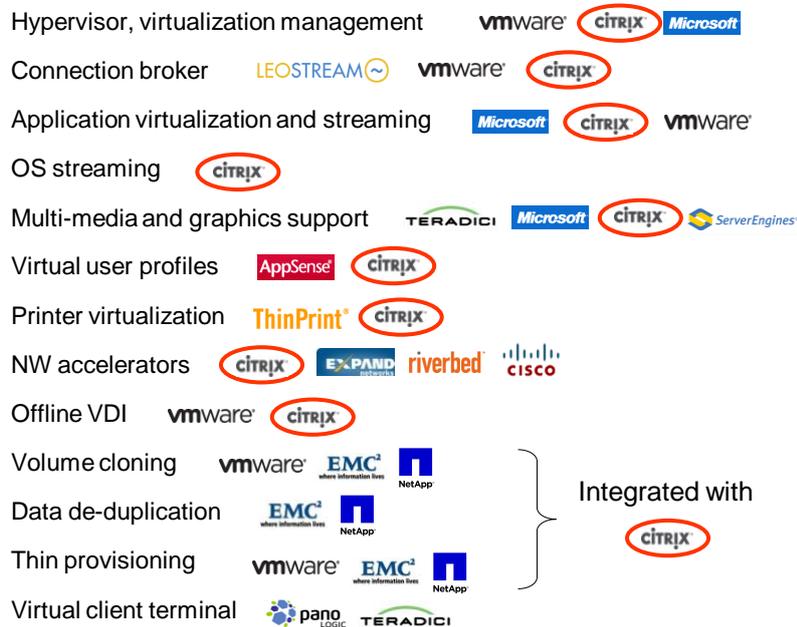
Fujitsu has been active in the desktop virtualization marketplace from the very beginning. We evaluated and tested all the various technologies involved, and we combined them to pre-integrated infrastructure solutions which we call “Virtual Workplace”. For various application scenarios we created optimized configuration templates which can easily be adapted to customer-specific requirements. Based on proven methodology and processes, we support customers in their individual proof-of-concept. If needed, we offer a so-called Try & Buy Package including hardware, software and middleware for up to 100 virtual desktops.



An important part of Virtual Workplace is the end-to-end service approach. We consult the customer and elaborate together with him the optimum solution; we design the future architecture according to his business requirements, implement and integrate his virtual desktop infrastructure, and look after maintaining the entire solution stack. With our ROI services we either estimate or even bindingly predict the financial impact of the new infrastructure. With this end-to-end solution approach, we help our customers reduce complexity, time and risk, and make life much easier for them.

CITRIX IS A MAJOR DESKTOP VIRTUALIZATION PLAYER

Having a closer look at the possible technologies which can be involved in a desktop virtualization solution, you notice that Citrix appears on most of the layers. And those technologies from storage vendors, that help reduce storage capacities, can be easily integrated with Citrix technologies using the StorageLink function. Out of this there can be only one conclusion: Citrix is a major desktop virtualization player.



Citrix’s desktop virtualization solution is named XenDesktop. Due to Citrix FlexCast technology, every type of virtual desktop can be delivered, thus meeting the requirements of all user types. Citrix FlexCast supports terminal server infrastructures, VDI, central PCs in the data center, desktop streaming and application streaming. XenDesktop includes XenApp for on demand application delivery. Citrix Provisioning Server enables effective provisioning, and in combination with XenApp, even a dynamic desktop assembly and delivery. The “high definition” HDX technologies give end users a rich, personalized desktop experience. And finally, XenDesktop fits perfectly into an existing Citrix infrastructure, i.e. the access and security infrastructure can also be used for the new virtual desktop infrastructure.

Due to its open architecture, XenDesktop works with various hypervisors, such as XenServer, Microsoft Hyper-V, VMware ESX or vSphere, and with a multitude of storage systems. XenDesktop will also closely integrate with Microsoft App-V and System Center for application management.

Even before XenServer was offered for free, it was included in XenDesktop. And as Citrix owns the source codes of both, XenDesktop and XenServer, it is no surprise that XenDesktop is optimized for XenServer. It is worth mentioning that XenServer has gained market momentum and has become mature. But what currently is the most important argument for XenServer: you achieve a virtualization of terminal server farms at the best performance.

These are the reasons why Fujitsu regards XenDesktop and XenServer as a must for their Virtual Workplace solution.

OEM PARTNERSHIP MAKES LIFE EASIER

If you need Citrix software for building Dynamic Infrastructures - which is Fujitsu's daily job - our OEM partnership makes your life easier: Customers and channel partners get a one-stop shopping with a single point of contact for hardware, software and services, what makes the entry into the Citrix world rather simple for them.

Another positive impact of the OEM partnership for Fujitsu is the early involvement in release plans and the access to special information, from which customers and partners will benefit as well.

PRODUCTS INCLUDED IN OEM AGREEMENT

Which products are included in the OEM agreement? There is first of all XenDesktop with its VDI, Enterprise and Platinum Editions. Fujitsu offers bundles of 10, 50 and 100 perpetual licenses.

XenDesktop Features	Express	VDI	Enterprise	Platinum
Desktop Delivery Controller				
Essentials for XenServer Enterprise				
XenServer				
Provisioning Services				
StorageLink				
XenApp Platinum				
XenApp Enterprise				
Access Gateway Enterprise				
Access Gateway Basic				
Workflow Studio				
EasyCall				
Profile Management				
Edgesight for Virtual Desktops				
Branch Repeater				
Password Manager				

The licensing model of XenDesktop is rather flexible. Customers have the choice between user-based and device-based licenses. The user-based model enables the licensed user to access any desktop environment from an unlimited number of devices. This is in particular attractive for users who alternately use their business PC, their home PC or any other device while being on the move. The device-based model enables any user and any number of users to access any desktop environment from a licensed device. This model is especially attractive for access devices in travel agencies, banks or training centers which are used alternately by a large plenty of people. Licenses can be re-assigned after a period of 90 days. The re-assignment option also allows switching from device-based to user-based licenses and vice versa.

Then there is XenServer with its Premium Editions Advanced, Enterprise and Platinum, where one perpetual license is good for one physical server. Of course, upgrade options to superior editions are also part of the OEM contract.

XenServer Features	Free	Advanced	Enterprise	Platinum
XenServer Hypervisor				
XenMotion live migration				
VM Disk Snapshot and Revert				
XenCenter Management				
Resilient distributed management architecture				
XenConvert & OVF Support				
High availability				
Memory optimization				
Performance Alerting and Reporting				
Automated Workload Balancing				
Host Power Management				
Provisioning Services (virtual servers)				
Role Based Administration & Audit Trail				
Live Memory Snapshot				
StorageLink				
Lifecycle management				
Site recovery				
Provisioning Services (physical servers)				

The perpetual licenses are combined with a Subscription Advantage for 1 or 3 years which is good for software updates and upgrades. Optionally, the Subscription Advantage can be renewed for one more year.

All current PRIMERGY rack server and blade server models are certified by Citrix for XenServer. The same is true for all relevant storage systems which we use in our dynamic infrastructures.

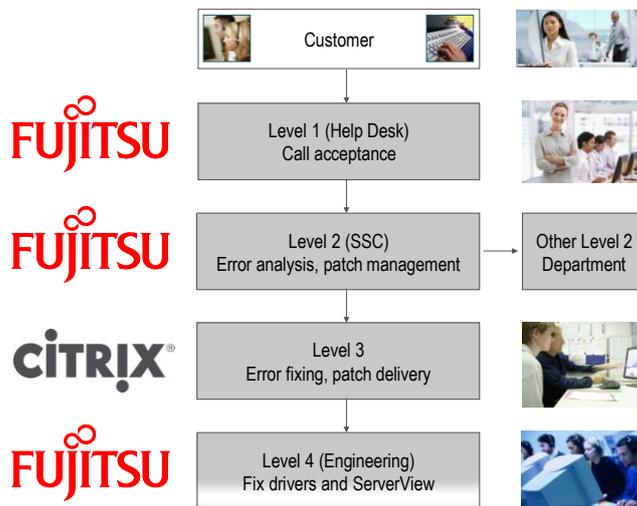
INTEGRATION WITH PRIMERGY SERVER MANAGEMENT

All our operating systems with an OEM status are perfectly integrated with the PRIMERGY server management, called ServerView. For this purpose we developed special agents for XenServer, which are steadily maintained with full quality assurance. Due to these agents, all server management functions are also available in a XenServer environment, what makes XenServer equivalent to our other operating systems with OEM status.

Integration with PRIMERGY server management also means integration with the innovative ServerView Resource Coordinator VE (RCVE), which enables a dynamic allocation of system resources.

HIGHER SUPPORT AND SERVICE CAPABILITIES

XenDesktop and XenServer are the basis for business-critical enterprise infrastructures. Therefore Fujitsu offers, in addition to the perpetual licenses and the Subscription Advantage, various service options which encompass proactive and reactive services. For this purpose, customers order a certain number of calls or hours. Flat time-bound service contracts are also available. Service levels vary in response time (either 2 or 4 hours) and service time, where you have the choice between 5x9 and 7x24. Call acceptance is always 7x24.



In order to increase support and service capabilities, we created a formalized process for the support levels 1-4 where the support organizations of both, Fujitsu and Citrix, are tightly coupled. On level 1 Fujitsu looks after call acceptance. On level 2, Fujitsu has got support engineers with profound Citrix knowledge and skills, which in most cases makes the involvement of the 3rd level at Citrix superfluous. Basically level 3 is only involved for fixing software errors and respecting patch delivery. If issues with drivers or ServerView are identified, these will be forwarded to engineering level 4 at Fujitsu. The result of this process is faster and better service delivery and problem resolution.

WHY FUJITSU IS IMPORTANT FOR CITRIX

Citrix is important for Fujitsu, but Fujitsu is important for Citrix, too. Fujitsu's strategy is about dynamic infrastructures, and these require enabling technologies, what opens lots of new business opportunities for Citrix as well. Fujitsu, with its end-to-end approach, is seen as one of the few suppliers of complete VDI solutions.

We are a leading vendor of PC, server and storage solutions. Our highly reliable products are based on innovative technologies; our power-saving platforms and the implemented guidelines for power management are only one of many examples.

And finally we should not forget Fujitsu's end-to-end service capabilities. With 175,000 employees in 70 countries, and partners in 220 countries, Fujitsu is a real global player. And in Germany and Japan, Fujitsu is the market leader.

SUMMARY

So let us summarize the value of the OEM partnership of Fujitsu and Citrix for our customers and partners: Fujitsu's strategy is about Dynamic Infrastructures, and these require world-class enabling technologies: Citrix XenDesktop and XenServer make Fujitsu's offering more comprehensive and attractive. Both products represent enabling technologies for Virtual Workplace and Managed Virtual Workplace. They enable us always to provide optimum IT infrastructure solutions.

Customers and channel partners benefit from integrated and certified solutions from market leaders in virtualization; they also take advantage from the one-stop shopping option, and high support levels. All this helps reduce complexity, project time, risk and cost.

ADDITIONAL INFORMATION

http://ts.fujitsu.com/products/standard_servers/server_solutions/citrix.html

CONTACT

FUJITSU TECHNOLOGY SOLUTIONS GMBHJ
 Mies-van-der-Rohe-Straße 8
 D-80807 München, Germany
 Phone: +49 7203-922078
 Fax: +49 821 804 88429
 E-mail: gernot.fels@ts.fujitsu.com
 Website: ts.fujitsu.com/
 2010-06-01 CE-EN

Here follows the legal disclaimer of your organization:

e.g.: All rights reserved, including intellectual property rights. Technical data subject to modifications and delivery subject to availability. Any liability that the data and illustrations are complete, actual or correct is excluded. Designations may be trademarks and/or copyrights of the respective manufacturer, the use of which by third parties for their own purposes may infringe the rights of such owner. For further information see ts.fujitsu.com/terms_of_use.html
 Copyright © Fujitsu Technology Solutions GmbH 2010